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Serum Creatinine can be Reduced by Applying Homeopathic Medicines according to the Symptom Similarity: Case Study Analysis of Chronic Kidney Disease (CKD)

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Authors' contributions

This work was carried out in collaboration among all authors. Author NEAR conceptualized the need for study, case record, repertorization, symptoms analysis, medical investigation reports and drafting the manuscript for submission. Author MSA also conceptualized the need for study. Authors MAZ and MSEH edited significant revisions of the manuscript as submitted. All of them fully read the manuscript and provided new content based in their experience as homoeopathic individuals. They also assisted in the design of CKD friendly language and interpretation of the discussion and conclusion.

Article Information

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ABSTRACT

Background: Over the past few decades, chronic kidney disease (CKD) with high serum creatinine has turned into an intensive clinical and epidemiological research in Bangladesh as well as globally. Even though the transparency provided by the Kidney Disease Outcomes Quality Initiative (KDOQI) guidelines, there appears to be within the CKD with high serum creatinine research literature significant dissimilarity on how to define CKD and assess kidney function. In this situation homeopathic symptomatic treatment can play a vital role in CKD with high creatinine.

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Methods: The cases of four patients with CKD and high creatinine from our observations are discussed, those whom were benefited by homeopathic treatment. The more common remedies administered in the treatment of CKD with high creatinine include: *Lycopodium clavatum, Apis mellifica, Apocynum cannabinum, Aurum muriticum, Cuprum metalicum Cantharis, Sarsaparilla, Glonoine, Serum anguillae, Berbaris vulgaris,... etc.* The patho-physiologies, diagnosis, review of CKD and serum creatinine are discussed. These case study analyses of CKD emphasize that a consideration of CKD symptoms with high serum creatinine, in addition to more constitutional symptoms, is important when homeopathically analyzing these cases.

Results: The positive effects of different homeopathic medicines were clearly reducing serum creatinine during the treatment of CKD patients without hemodialysis with cost effectiveness and most harmless way.

Conclusions: These case study analyses found that early proper diagnosis, most appropriate selection of homeopathic remedies and follow-up is important to cure the CKD with high serum creatinine and possible resulting renal failure can be dreadful.

Keywords: Chronic kidney diseases; serum creatinine; homeopathic remedies; hemodialysis; cost effectiveness.

1. INTRODUCTION

Chronic kidney disease (CKD) is a general term for heterogeneous disorders affecting the kidney structure and function [1]. CKD is a worldwide public health problem. There is an increasing incidence and prevalence of patients with kidney failure requiring replacement therapy, with poor outcomes and high cost [2]. Creatinine is a chemical waste product in the blood that passes through the kidneys to be filtered and eliminated in urine. The chemical waste is a by-product of normal muscle function. The more muscle a person has, the more creatinine they produce. Levels of creatinine in the blood reflect both the amount of muscle a person has and their amount of kidney function [3].

1.1 Chronic Kidney Disease

CKD is a condition characterized by a gradual loss of kidney function over time [4] due to change of its underlying aetiopathogenesis associated with high serum creatinine and low hemoglobin level. Although kidney disease infections now considered less important in the western world, but currently hypertension and diabetes are evidenced as the two major determinants of kidney disease [5]. Obesity and infections and low economic situations [6] are also responsible.

The outcomes of the included studies (nine studies, a total of 225,206 participants) based on meta-analysis showed an overall prevalence of CKD in Bangladeshi people of 22.48%, which was higher than the global prevalence of CKD. The prevalence of CKD in females was higher

with high heterogeneity (l^2 90%) in contrast to male participants (25.32% vs. 20.31%) [7].

The burden of chronic kidney disease (CKD) is studied predominantly in high-income countries, mainly in terms of prevalence, quality of life, mortality, and kidney and cardiovascular complications. Even where results of large-scale national CKD screening programmes are available, many data sources report CKD estimates only for selected populations (limited by age group, geography, occupation,...etc), and for many countries there are no data for CKD The Global epidemiology. Burden of Diseases(GBD), Injuries, and Risk Factors Study is a major effort to collect and incorporate into one system all available data for 354 diseases and 84 risk factors from the published literature, registries, vital registration systems, verbal autopsies, hospital records data,... etc. GBD applies comprehensive statistical modeling to produce comparable estimates of the burden at the global, regional, and national levels [8].

1.2 Serum Creatinine

Creatinine is a waste product that comes from the normal wear and tear on the muscles of the body. Everyone has creatinine in their bloodstream [9]. Healthy kidneys filter creatinine and other waste products from the blood. The filtered waste products leave the body through urine. Creatinine is produced from creatine. Approximately 2% of the body's creatine is converted to creatinine every day. If kidneys are not functioning properly, an increased level of creatinine may accumulate in your blood. A serum creatinine test measures the level of creatinine in your blood and provides an estimate of how well kidneys filter .A creatinine urine test can measure creatinine in urine. Most men with normal kidney function have approximately 0.6 to 1.2 milligrams/deciliters of creatinine. Women usually have lower creatinine levels than men because women on average have less muscle than men [3].

1.2.1 Fast facts on chronic kidney disease

Here are some key points about chronic kidney disease:

- common symptoms include blood in urine, high blood pressure, and fatigue;
- causes include diabetes and specific kidney diseases, which includes polycystic kidney disease;
- there is no cure for chronic kidney disease, which means treatment is focused on reducing symptoms;
- diagnosis commonly occurs after blood tests, kidney scans, or biopsy [10].

1.2.2 Causes of chronic Kidney Disease

- Diabetes chronic kidney disease is linked to diabetes types 1 and 2. If the patient's diabetes is not well controlled, excess sugar (glucose) can accumulate in the blood. Kidney disease is not common during the first 10 years of diabetes; it more commonly occurs 15-25 years after diagnosis of diabetes [10].
- Hypertension (high blood pressure) High blood pressure can constrict and narrow the blood vessels, which eventually damages and weakens them throughout the body, including in the kidneys. The narrowing reduces blood flow. If your kidneys' blood vessels are damaged, they may no longer work properly. When this happens, the kidneys are not able to remove all wastes and extra fluid from your body. Extra fluid in the blood vessels can raise your blood pressure even more, creating a dangerous cycle, and cause more damage leading to kidney failure[11].
- Prolonged obstruction of the urinary tract, from conditions such as enlarged prostate, kidney stones and some cancers [12].
- Pyelonephritis, a urinary tract infection within the kidneys, which can result in scarring as the infection heals. It can lead to kidney damage if it happens several times [13].

- Kidney artery stenosis the renal artery narrows or is blocked before it enters the kidney.
- Certain toxins including fuels, solvents (such as carbon tetrachloride), and lead (and lead-based paint, pipes, and soldering materials). Even some types of jewelry have toxins, which can lead to chronic kidney failure.
- Fetal developmental problem if the kidneys do not develop properly in the unborn baby while it is developing in the womb.
- Systemic lupus erythematosus an autoimmune disease. The body's own immune system attacks the kidneys as though they were foreign tissue.
- Malaria and yellow fever known to cause impaired kidney function.
- Some medications overuse of, for example, NSAIDs (non-steroidal antiinflammatory drugs), and such as aspirin or ibuprofen.
- Illegal substance abuse such as heroin or cocaine.
- Injury a sharp blow or physical injury to the kidney(s) [14].

1.2.3 Clinical features of CKD

Signs and symptoms of chronic kidney disease develop over time if kidney damage progresses slowly. Signs and symptoms of kidney disease may include:

- nausea
- vomiting
- loss of appetite
- fatigue and weakness
- sleep problems
- changes in how much you urinate
- decreased mental sharpness
- muscle twitches and cramps
- swelling of feet and ankles
- persistent itching
- chest pain, if fluid builds up around the lining of the heart
- shortness of breath, if fluid builds up in the lungs
- high blood pressure (hypertension) that's difficult to control [15].

Signs and symptoms of kidney disease are often nonspecific, meaning they can also be caused by other illnesses. Because your kidneys are highly adaptable and able to compensate for lost function, signs and symptoms may not appear until irreversible damage has occurred [15].

1.2.4 Pathophysiology of kidney disease

To know pathophysiology of CKD, structural and physiological characteristics of kidney as well as the principles of renal tissue injury and repair should be taken into reflection.

Firstly, the rate of renal blood flow of approximately 400 ml/100g of tissue per minute is much greater than that observed in other well per fused vascular beds such as heart, liver and brain. As a consequence, renal tissue might be exposed to a significant quantity of any potentially harmful circulating agents or substances. Secondly, glomerular filtration is rather high intradependent on and under transglomerular pressure (even physiologic conditions), rendering the glomerular capillaries vulnerable to hemodynamic injury, in contrast to other capillary beds. In line with this, Brenner and coworkers identified glomerular hypertension and hyper filtration as major contributors to the progression of chronic renal disease. Thirdly, glomerular filtration membrane has negatively charged molecules which serve as a barrier retarding anionic macromolecules. The disruption in this electrostatic barrier, as is the case in many forms of glomerular injury, plasma protein gains access to the glomerular filtrate. Fourthly, the sequential organization of (glomerular nephron's microvasculature convolute and the peritubular capillary network) and the downstream position of the tubuli with respect to glomeruli, not only maintains the glomeruli-tubular balance but also facilitates the spreading of glomerular injury to tubulo-interstitial compartment in disease, exposing tubular epithelial cells to abnormal ultra filtrate. As peritubular vasculature underlies glomerular circulation, some mediators of glomerular inflammatory reaction may overflow into the peritubular circulation contributing to the interstitial inflammatory reaction frequently recorded in glomerular disease. Moreover, any decrease in pre-glomerular or glomerular perfusion leads to decrease in peritubular blood flow, which, depending on the degree of hypoxia, entails tubulo-interstitial injury and tissue remodeling. Thus, the concept of the nephron as a functional unit applies not only to renal physiology, but also to the pathophysiology of renal diseases. In the fifth place, the glomerulus itself should also be regarded as a

functional unit with each of its individual constituents, i.e. endothothelial, mesangial, visceral and parietal epithelial cells - podocytes, and their extracellular matrix representing an integral part of the normal function. Damage to one will in part affect the other through different mechanisms, direct cell-cell connections (e.g., gap junctions), soluble mediators such as chemokines, cytokines, growth factors, and changes in matrix and basement membrane composition.

The main causes of renal injury are based on immunological reactions (initiated by immune complexes or immune cells), tissue hypoxia and ischemia, exogenic agents like drugs, endogenous substances like glucose or par proteins and others, and genetic defects. Irrespective of the underlying cause glomerulosclerosis and tubulo-interstitial fibrosis are common to CKD.

An overview of the pathophysiology of CKD should give special consideration to mechanisms of glomerular, tubular and vascular injury [16].

1.2.5 Stages of CKD

CKD is defined as either kidney damage or GFR <60 ml/min per 1.73 m² for \ge 3 months. Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests or imaging studies [17].

1.3 Homoeopathic Aspect

Homoeopathy treats the patient as a whole extent, in the shortest, most reliable, and most [18]. harmless way This implies that homoeopathic medicine for chronic renal failure focuses on patient as a person as well as his pathological condition. The homoeopathic medicine for chronic renal failure are selected after a full individualize examination and case analysis, which includes medical history of patient, physical and mental constitution etc. A miasmatic tendency is also often taken into account for the treatment of chronic renal failure [19,20].

Homoeopathy carrying the holistic concept doesn't recognize renal failure as merely a disease related to the kidney alone but always consider something prior to this sickness that is to say the morbid affection of life/vital force, the

| Stage | Description | GFR (ml/min per 1.73 m ²) |
|-------|--|---------------------------------------|
| 1 | Kidney damage with normal or increased GFR | ≥90 |
| 2 | Kidney damage with mild decreased GFR | 60 to 89 |
| 3 | Moderate decreased GFR | 30 to 59 |
| 4 | Severe decreased GFR | 15 to 29 |
| 5 | Kidney failure | <15 or dialysis |

Table 1. Stages of CKD

suffering of the dynamic; or the life principle of the organism due to which individual as a whole suffers. His suffering is made known to us through different perceptible sign and symptoms (characteristic symptom) which constitute not only the sole guide to the choice of the curative remedy, but also sometimes, it is very difficult to find individual single remedy which can cover the totality, due to paucity of characteristic symptoms or due to severe suppression of the disease or due to advanced pathological changes in the body. Hence, in this situation, one has to prescribe a medicine based on the present signs and symptoms and this is the condition where rare homoeopathic medicine has its important role to play which clears the pictures of disease and provides fastest possible recovery [21].

1.3.1 Miasmatic interpretation of chronic kidney disease

Kidney develops from within the intermediate mesoderm, early nephrons develop from induction of primary mesenchymal cells. It is most highly differentiated organ in the body. The kidneys are important for maintaining the body's internal balance, especially of water and minerals (sodium. potassium. chloride. phosphate. magnesium, sulphate,..etc.); acid base balance and removal of fuel or drug metabolites [22]. The kidneys also function as a part of the endocrine system and produce erythropoietin and calcitriol, thrombopoietin, and renin prostaglandin performing hemopoietic function, regulation of blood calcium level; regulation of blood pressure by regulating the volume of extracellular fluid and through renin-angiotensin mechanism [23].

Chronic kidney disease is defined as an abnormality of kidney structure or function for ≥ 3 months. The most common causes of CKD are diabetes mellitus, hypertension and glomerulonephritis. There is permanent and irreversible impairment of both-glomerular and tubular function of gradual onset of such severity that kidneys are no longer able to maintain the

internal environment. The rate of progression is variable and it may take months or many years to reach end stage renal disease. This represents a stage of kidney CKD where accumulation of toxins, fluid and electrolytes normally excreted by the kidney results in uremic syndrome. This syndrome leads to death of the patient unless toxins are removed by any means [24].

Homoeopathic consideration of CKD observed through cases has built an understanding that the development of the disease itself is the ultimate. An individual case needs proper understanding of the circumstantial factors which led to the development of the disease. Miasmatic background has to be evolved in this manner. CKD is a representative chronic syndrome, since it is characterized by a gradual progression and multi-factorial nature. A significant number of diseases can lead to the manifestation of CKD, and notably, many of them are idiopathic [24].

Considering the end stage renal disease, it is essentially syco-syphilitic in nature owing to nature of the symptoms. However the developmental stages of renal failure involve different pathological changes and these changes will decide the miasmatic preponderance at that stage [24].

2. METHODOLOGY

2.1 Study aim

The overall aim of this study was to determine the practice patterns for CKD with high serum creatinine and low hemoglobin patients by homeopathic symptomatic remedies without hemodialysis. This information should inform future service development and the design of a future prospective research study to evaluate the effectiveness. cost-effectiveness and appropriateness of chronic kidney management compared with hemodialysis for treating CKD with high serum creatinine patients. To make it clear that a chronic kidney patient can lead a normal life with low cost by homeopathic treatment without any hemodialysis.

2.2 Methods

The case study of four patients with CKD and high creatinine from our observations are discussed, those whom were benefited by homeopathic treatment. The more common remedies administered in the treatment of CKD with high creatinine include: Lycopodium Clavatum. Apis Mellifica. Apocynum Cannabinum. Aurum Muriticum. Cantharis, Sarsaparilla, Glonoine, Serum Anguillae, Berbaris Vulgaris,... etc. The patho-physiologies, diagnosis, review of CKD and serum creatinine are discussed. These case study analyses of CKD emphasize that a consideration of CKD symptoms with high serum creatinine, in addition to more constitutional symptoms, is important when homeopathically analyzing these cases.

3. PRESENTATION OF CASES

3.1 Case Study-1

A 63 years old elderly patient came to the Jannat Homeo Hall, Kazipara, Dhaka from Rangpur on April 4, 2017, who had chronic parenchymal renal disease, HTN with high serum creatinine and low hemoglobin for which he was treated conventional treatment with hemodialysis, but the problems of this patient were gradually become serious and that time he was also suffering from severe dyspnoea, puffiness of the face and pitting leg edema and other CKD symptoms. On March 29, 2017 his serum creatinine was 11.5 mg/d. According to law symptom similarity of homeopathy, this patient was treated by homeopathic medicine without hemodialysis, and then almost 7 months later, on October15, 2017 his serum creatinine had come down 5.56 mg/dl and on November 5, 2017 his serum creatinine had come down 2.9 mg/dl.

3.2 Case Study-2

A 57 years old person presented on June 20, 2027 with complaints of generalized swelling more on both legs and face for 7 months. The patient was too much weak and prostrated. He was also having breathing difficulty and some black pigmentation was also present here and there. Patient was hypertensive and used to take modern medicine. All the complaints had started after liver complain. Patient had no significant past history other than rheumatoid arthritis and family history was also not significant. His upper lip was cracked. His tongue was brown coated. Appetite was diminished with empty stomach, constant eructation. Constant nausea, frequent vomiting, used to take a little water from time to time. Abdomen was distended with flatulence and it was difficult to pass the gas. On Jun 6, 2017 his serum creatinine was 14.20 mg/dl. According to law of symptom similarity of homeopathy, without hemodialysis, the patient was treated by symptomatic homeopathic remedy and then almost one month later, on July 8, 2017 his serum creatinine fall down 2.50 mg/dl and on April 3, 2018 his serum creatinine had fall down 1.50 mg/dl.

3.3 Case Study-3

On December 23, 2018, a 61 years diagnosed CKD old patient's son called us over phone at the Jannat Homeo Hall, Kazipara, Mirpur, Dhaka from Mymonshingh district for better treatment with low cost without hemodialysis. He had developed hypertension several years earlier and was being treated with conventional medicine. The heart rate was 64/min, while the blood pressure was 146/90 mm Hg. His parents, grandparents, and brother had no kidney disease and heart disease. The patient was 164 cm tall and weighed 68 kg. There was slight pitting edema in both legs and face. On December 24, 2018 the patient was being done serum creatinine by our advice. Laboratory report revealed a serum creatinine of 7.78 mg/dl. Next day the patient came to Dhaka with his son and we examined him thoroughly both physically and mentally. We took his case taking according to law of homeopathic symptoms similarity. We also confirmed and noticed that patient was CKD with At that time, throbbing chest, hypertensive. anorexia, Nausea and vomiting, general weakness were belong in the patient. According to law of symptom similarity of homeopathy, the patient was treated by symptomatic homeopathic remedy and on January 2, 2019 his serum creatinine fall down 7.1 mg/dl and on September 25, 2020 his serum creatinine had fall down 4.92 mg/dl. Though there is no remarkable change of serum creatinine but patient has been leading better life without hemodialysis from the starting period of treatment to till date.

3.4 Case Study-4

The case study begins with a 26 years old male, presented with a history of generalized weakness, nausea, reduced appetite and reduced urine output for two months. He had Sleep problems, mental anxiety, muscle twitches and cramps, Swelling of feet and ankles, Persistent itching, chest pain, shortness of Rasel et al.; JOCAMR, 12(1): 1-10, 2020; Article no.JOCAMR.62529

breath, H/o high blood pressure (hypertension) that's difficult to control from 3 years back. He had low back pain for a long time that's controlled by analgesics. Family history was non diabetic and non hypertensive. His initial serum creatinine was 3.3 mg/dl on February 2, 2020 and it had come down to 2.1 mg/dl on August, 2020. According to law of symptom similarity of homeopathy, the patient was treated by homeopathic remedy. The patient had a remarkable change of serum creatinine and has been leading comparatively better life without hemodialysis from the starting period of treatment to till date.

3.5 Homoeopathy in CKD with High Serum Creatinine

The main principle of homeopathy, a unique scientific system of medicine established by Samuel Hahnemann two centuries ago, is that of 'similia' or 'simile' (similarity), which means 'let likes be cured by likes'. In other words, when a substance is capable of inducing a series of symptoms in a healthy living system, low doses of the same substance can cure these symptoms under certain circumstances ('similia similibus curentur') [25]. The concept of homoeopathy is related to treat the patients not only through holistic approach but also considers individualistic characteristics of the person. In this mode of treatment, one considers the sick person as a whole rather than the disease to the parts. The symptoms are considered as the body's natural reaction to the illness and help to find a remedy against the illness. The physician perceives all the derangements at physical and mental levels of the patient, brings about a conceptual image of the patient through totality of symptoms and selects the medicine, which is most similar to the symptomatic totality of the patient.

Kidney dialysis is a considerably stressful procedure for patients, and it can be economically draining as well. It also carries the risk of various infections and iatrogenic complications [26,27]. Homoeopathy works wonderfully in the management of different pathological conditions like CKD with high serum creatinine. As homoeopathy works on the principle of similia, there is no barrier in the management of CKD like condition.

4. RESULTS

The outcomes of these case studies clearly show the efficacy of the homeopathic drugs in CKD with high serum creatinine. The positive effects of different homeopathic medicines were clearly reducing serum creatinine during the treatment of CKD patients without hemodialysis with cost effectiveness and most harmless way.

5. DISCUSSION

On World Health Day, latest studies show ray of hope for patients of kidney failure and hypothyroidism through Homeopathy. According to the latest study, a positive impact has been noticed of homeopathy treatment on a significant percentage of patients of kidney failure and hypothyroidism. The chronic kidney disease study analyzed the records of 61 patients across two non-continuous months in 2018 and 2019. It found that by the third visit to the clinic, 50-58.3 per cent patients demonstrated an improvement in their serum urea and creatinine readings."In the chronic kidney disease study, we found that two of the most clinically important readings in patients showed improvement. No currently available treatment is able to effect a reduction in serum urea and creatinine readings. This may turn out to be of immense benefit to patients. Since these readings are a part of the decisionmaking process of whether to start dialysis or not, homeopathic treatment may help patients avoid the start of dialysis" said Dr Kalyan Banerjee, who was instrumental behind the study [28]. In this study, we only showed that serum creatinine was reduced gradually by selective homeopathic remedies which were selected according to law of symptom similarity. Homeopathic medicines along with conventional treatment not only repair the damaged kidneys but side by side it helps in maintaining the normal blood sugar level and blood pressure [29].

Case study-1, showed, on March 29, 2017 patient's initial serum creatinine was 11.5 mg/dl. According to law symptom similarity of homeopathy, this patient was treated by homeopathic medicine without hemodialysis, and then almost 7 months later, on October15, 2017 his serum creatinine had come down 5.56mg/dl and on November 5, 2017 his serum creatinine had come down 2.9mg/dl. This is an important significant for homeopathy. Case study-2, showed, on Jun 6, 2017 patient's initial serum creatinine was 14.20 mg/dl. According to law of symptom similarity of homeopathy, without hemodialysis, the patient was treated by symptomatic homeopathic remedy and then Rasel et al.; JOCAMR, 12(1): 1-10, 2020; Article no.JOCAMR.62529

almost one month later, on July 8, 2017 his serum creatinine fall down 2.50mg/dl and on April 3, 2018 his serum creatinine had fall down 1.50mg/dl. Case study-3, on December 24, 2018 the patient's initial serum creatinine was 7.78 mg/dl. According to law of symptom similarity of homeopathy, the patient was treated by symptomatic homeopathic remedy and on January 2, 2019 his serum creatinine fall down 7.1mg/dl and on September 25, 2020 his serum creatinine had fall down 4.92 mg/dl. Though there is no remarkable change of serum creatinine but patient has been leading better life without hemodialysis from the starting period of treatment to till date. Case study-4, patient's initial serum creatinine was 3.3 mg/dl on February 2, 2020 and it had come down to 2.1 mg/dl on August, 2020. According to law of symptom similarity of homeopathy, the patient was treated by homeopathic remedy. The patient had a remarkable change of serum creatinine and has been leading comparatively better life without hemodialysis from the starting period of treatment to till date. Thus, in the case of kidney patients, if symptomatic homeopathic treatment can be continued, it is possible to treat chronic kidney disease without less difficulty, at low cost, without hemodialysis.

6. CONCLUSIONS

The homoeopathic management of CKD is done with the artistic use of law of similia. These case study analyses found that early proper diagnosis, most appropriate selection of homeopathic remedies and follow-up is important to cure the CKD with high serum creatinine and possible resulting renal failure can be dreadful. The advance pathological condition like renal failure can be handled by use of small remedies with marvelous output. Even the constitutional remedies are also much helpful when one considers the miasmatic background. Unfortunately, the repertorial use one should not forget to get the similimum for the pathological cases like CKD.

PATIENT CONSENT

All authors declare that written consent was obtained from the patients to publish the case information

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

- 1. Levey A, Coresh J. Chronic kidney disease. The Lancet. 2012;379(9811): 165-180.
- Eknoyan G, Lameire N, Barsoum R, Eckardt K, Levin A, Levin N, Locatelli F, Macleod A, Vanholder R, Walker R, Wang, H. The burden of kidney disease: Improving global outcomes. Kidney International. 2004;66(4):1310-1314. DOI: https://doi.org/10.1111/j.1523-1755.2004.00894.x
- Linkedin.com. Homoeopathy for high level of creatinine in blood; 2020 Available:https://www.linkedin.com/pulse/h omoeopathy-high-level-creatinine-blood-drks-gopi/ [Accessed 21 September 2020].
- 4. National Kidney Foundation. Facts about chronic kidney disease; 2020. Available:https://www.kidney.org/atoz/cont ent/about-chronic-kidney-disease [Accessed 21 September 2020].
- Hasan M, Kashem M, Rahman M, Qudduhush R, Rahman M, Sharmeen A. Islam N. Prevalence of chronic kidney disease (CKD) and identification of associated risk factors among rural population by mass screening. Community Based Medical Journal. 2013;1(1):20-26. DOI: 10.3329/cbmj.v1i1.13825
- Yirsaw B. Chronic kidney disease in sub-Saharan Africa: Hypothesis for research demand. Annals of African Medicine. 2012; 11(2):119.

DOI: 10.4103/1596-3519.93537

- Banik S, Ghosh A. Prevalence of chronic kidney disease in Bangladesh: A systematic review and meta-analysis. Int Urol Nephrol; 2020. Available:https://doi.org/10.1007/s11255-020-02597-6
- Bikbov B. et al. Global, regional, and national burden of chronic kidney disease, 1990–2017: A systematic analysis for the

Global Burden of Disease Study 2017. *The Lancet*. 2020;395(10225):709-733. DOI:https://doi.org/10.1016/S01406736(20)30045-3

- Creatinine: What is it?; 2020. Available:https://www.kidney.org/atoz/cont ent/what-creatinine Accessed: 2020- 09- 24.
- 10. Chronic kidney disease: Symptoms, causes, and treatment: 2020. Available:https://www.medicalnewstoday.c om/articles/172179#symptoms Accessed: 2020- 09- 24.
- Chronic kidney disease Symptoms and causes; 2020. Available:https://www.mayoclinic.org/disea ses-conditions/chronic-kidneydisease/symptoms-causes/syc-20354521 Accessed: 2020- 09- 24.
- Chronic kidney disease Symptoms and causes; 2020.
 Available:https://www.mayoclinic.org/disea ses-conditions/chronic-kidneydisease/symptoms-causes/syc-20354521 Accessed: 2020- 09- 24.
- Information H, Disease K, Disease H, Disease H, Center T, Health N. High Blood Pressure & Kidney Disease | NIDDK. [online] National Institute of Diabetes and Digestive and Kidney Diseases; 2020. Available:https://www.niddk.nih.gov/healthinformation/kidney-disease/high-bloodpressure [Accessed 29 September 2020].
- Medicalnewstoday.com. Chronic kidney disease: Symptoms, causes, and treatment; 2020. Available:https://www.medicalnewstoday.c om/articles/172179#causes [Accessed 29 October 2020].
- Mayo Clinic. Chronic kidney disease symptoms and causes; 2020. Available:https://www.mayoclinic.org/disea ses-conditions/chronic-kidneydisease/symptoms-causes/syc-20354521 [Accessed 30 September 2020].
- Matovinović M. 1. Pathophysiology and classification of kidney diseases. PubMed Central (PMC); 2020. Available:https://www.ncbi.nlm.nih.gov/pm c/articles/PMC4975264/ [Accessed 3 November 2020].
- Bauer C, Melamed M, Hostetter T. Staging of chronic kidney disease: Time for A course correction: Table 1. 2020;19(5): 844-846.

DOI: https://doi.org/10.1681/ASN.2008010-110

- Hahnemann S. Organon of medicine, B. jain Publishers (Pvt) Itd, New Delhi-110055(INDIA); 1997. ISBN-7021-085-2,BOOK CODE B-2264.
- 19. Robert HA. The principles of art of cure by Homoeopathy, reprint, New Delhi, Indian Books & Periodicals Publishers. 2015;208-217.
- Ortega PS. Notes on Miasms, 1st edition, New Delhi, National Homoeopathic Pharmacy. 1980;183-191.
- 21. *Bharti* DP. Utilities of rare remedies of homoeopathy in the cases of acute renal failure. The Homoeopathic Heritage, 2020;20-24.
- 22. Jameson L, Kasper DL, Longo DL, Fauci Anthony S, Hauser Stephen L, Loscalzo Joseph, et. al. Harrison's principles of internal medicine; 20th edition; Mc Grew Hill Elsevier. 2018;2111-2116.
- Sembulingam K, Sembulingam Prema. Essentials of medical physiology; 5th edition, Jaypee Brothers Medical Publishers (P) LTD; 2009.
- 24. Kumari M. Study on the evolution of miasm in the cases of Renal failure homoeopathic understanding, The Homoeopathic Heritage. 2020;29-31.
- Bellavite P, Conforti A, Piasere V, Ortolani R. Immunology and homeopathy. 1. Historical background. Evidence-based complementary and alternative medicine : eCAM. 2005;2(4):441–452. Available:https://doi.org/10.1093/ecam/neh 141
- Abram HS, Moore GL, Westervelt FB Jr. Suicidal behavior in chronic dialysis patients. The American Journal of Psychiatry. 1971;127(9)1199–1204. Available:https://doi.org/10.1176/ajp.127.9. 1199
- Schieppati A, Remuzzi G. Chronic renal diseases as a public health problem: epidemiology, social, and economic implications. Kidney international. Supplement. 2005;(98):7–10. Available:https://doi.org/10.1111/j.1523-1755.2005.09801.x
- The Times of India. Giving Hope Through Homeopathy For Patients Of Kidney Failure And Hypothyroidism - Times Of India; 2020.
 Available:https://timesofindia.indiatimes.co m/life-style/health-fitness/giving-hopethrough-homeopathy-for-patients-of-

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kidney-failure-andhypothyroidism/articleshow/68763715.cms [Accessed 11 October 2020]. 29. Available:<https://www.homeopathictreatm ent4u.com/renalfailure.aspx; 2020. [Accessed 11 October 2020].

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